ARASH **HEIDARI**

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EDUCATION

Ghent University — **Ghent, Belgium**
Computer Science *(Ph.D)* — Aug 2021 – Present
- **Supervisors:** Dr. Ivo Couckuyt, Dr. Sebastian Rojas Gonzalez
- **Thesis:** Targeting Evaluation, Computation and Interaction Costs in Expensive Black-Box Multi-Objective Optimization

Iran University of Science and Technology — **Tehran, Iran**
Electrical Engineering *(MS.c.)* — Sep 2016 – Jul 2018
- **Supervisor:** Dr. Sattar Mirzakuchaki
- **Thesis:** DPA-Resistant and Low Power Cryptography in IoT Devices.
- **GPA:** 18.27 / 20

Iran University of Science and Technology — **Tehran, Iran**
Electrical Engineering *(BS.c.)* — Sep 2012 – Jul 2016
- **Supervisor:** Dr. Sattar Mirzakuchaki
- **Thesis:** Internet-Enabled Control for Enhanced Surveillance System Operation
- **GPA:** 16.19 / 20

EXPERIENCE

IDLab (imec - Ghent University) — **Ghent, Belgium**
AI Researcher — Aug 2021 – Present
- Execution of various AI-based projects from diverse corporate clients at IDLab.
- Successful collaborations with industry leaders: Boeing, Sirris, and Atlas Copco.
- Involvement in University-Industry Collaboration (Flanders AI Research Program).
- Supervision of junior researchers and master students

Iran University of Science and Technology — **Tehran, Iran**
AI Researcher — Jan 2019 – Dec 2020
- Execution of AI-based projects, as the primary responsibility.
- Collaborations with PhD and master's students on AI-related projects.
- Teaching machine learning, deep learning, and Python programming language.

SKILLS

Programming Python, C/C++, JavaScript, R, TensorFlow, PyTorch, SQL, Plotly

Machine Learning Deep Learning, Time-Series Analysis, Optimization, Uncertainty Quantification, Anomaly Detection, Resource-Efficient ML

Software Development GUI Development, Embedded Software Development, Linux

MLOps MLflow, Git, Docker, Grafana

Languages Persian, English (Fluent), German (Intermediate), Dutch, Spanish, French (Basic Understanding)

Soft Skills Leadership, Interdisciplinary Collaboration, Public Speaking, Technical Communication, Adaptability, Curiosity-Driven Learning

HIGHLIGHTED PUBLICATIONS

Towards Trustworthy Surrogate Models for Augmenting Certification: Fuel Tank Flammability Reduction System **2025**

- **Authors:** A. Heidari, L. Werthen-Brabants, S. Rojas Gonzalez, I. Couckuyt, C. Onur, P. van Gils, I. Jojic
- **Journal:** AIAA Journal of Aerospace Information Systems

Knee Detection in Bayesian Multi-Objective Optimization Using Thompson Sampling **2024**

- **Authors:** A. Heidari, J. Qing, S. Rojas Gonzalez, J. Branke, T. Dhaene, I. Couckuyt
- **Journal:** IEEE Transactions on Evolutionary Computation

Optimizing Memory Footprint for Radar-Based Human Activity Recognition on Resource-Constrained Devices **2024**

- **Authors:** A. Heidari, L. Werthen-Brabants, I. Couckuyt, T. Dhaene
- **Conference:** European Radar Conference (EuRAD)

Optimized Data Transmission for Radar-Based Edge-Cloud Human Activity Recognition via Quantization **2024**

- **Authors:** V. Tuytte, A. Heidari, L. Werthen-Brabants, I. Couckuyt, T. Dhaene
- **Conference:** European Radar Conference (EuRAD)

Lower Confidence Bound for Preference Selection in Interactive Multi-Objective Optimization **2024**

- **Authors:** A. Heidari, S. Rojas Gonzalez, I. Couckuyt, T. Dhaene
- **Conference:** The Genetic and Evolutionary Computation Conference (GECCO)

Data-Driven Surrogate Modeling for the Flammability Reduction System **2024**

- **Authors:** A. Heidari, L. Werthen-Brabants, T. Dhaene, I. Couckuyt, C. Onur, P. van Gils, I. Jojic
- **Conference:** AIAA SCITECH Forum

Surrogate-Assisted Evolutionary Algorithm for the Calibration of Distributed Hydrological Models Based on Two-Dimensional Shallow Water Equations **2024**

- **Authors:** J. Farfán-Durán, A. Heidari, T. Dhaene, I. Couckuyt, L. Cea
- **Journal:** Water

ACHIEVEMENTS

Outstanding Student – Digital Electronic Systems Graduate Program **2018**

- Granted direct admission to the Ph.D. program in electrical engineering at Iran University of Science and Technology

REFERENCES

References available upon request.